Grand Canyon

FINDING OF NO SIGNIFICANT IMPACT

North Rim Administration Building Grand Canyon National Park

Grand Canyon National Park proposes to construct a new administration building on the North Rim. The original North Rim Headquarters building was destroyed by fire in 1982 and it was subsequently replaced with the current administration building. The current building is a temporary premanufactured structure installed in 1982. The proposal to remove the current building and replace it with a new building is needed because:

- The current building is not of adequate size to accommodate the increased need for administrative services for the North Rim Unit.
- The current building is not adequately built to withstand the long-term impacts of seasonal winter weather.
- The current building is not compatible with the surrounding North Rim Headquarters Historic District.
- Vehicle conflicts between employees and visitors occur within the nearby residential areas and within the existing parking area. The existing level of parking is not adequate to accommodate current and projected future use in this area.

In May 2003 the National Park Service (NPS) prepared an *Environmental Assessment/Assessment of Effect (EA/AEF) for the North Rim Administration Building*. This EA/AEF, in accordance with the National Environmental Policy Act, analyzes the impacts that will likely result from implementation of the project. The environmental assessment evaluated three alternatives, Alternative A, the No Action Alternative, Alternative B, the agency's preferred alternative, and Alternative C.

PREFERRED ALTERNATIVE

Under the Preferred Alternative, the new building will be located in essentially the same location as the existing building. Access to the building will not change and visitors will continue to use the same entrance road and parking area as they do currently. The existing parking area will be somewhat modified to accommodate the new building design and layout, to address problems with traffic flow and vehicle/pedestrian safety concerns, and to improve parking capacity. This alterative will create 12 car parking spaces (including two designated as handicapped) and two recreational vehicle parking spaces. Additional employee parking near the bunkhouse and near the existing residence will also be added. Concrete walkways from the parking area to the administration building will be constructed. Disturbed areas will be revegetated with site-adapted native species. Project components will result in less than 1 acre of ground disturbance, most of which is previously disturbed land behind the existing building and adjacent to the existing parking area. Only one small snag (dead tree) behind the existing building will need to be removed for this project and no live trees will be removed.

Under either action alternative, the following actions will be implemented:

Building Design

The current administrative building will be demolished and a new building will be constructed. For each alternative, the new building will support the North Rim backcountry permit system, visitor contact services, public restroom and administrative offices. The building and parking area will comply with accessibility (ADA) standards. The building will be of the same size (approximately 2,467 square feet) and of essentially the same design under either Alternative B or Alternative C. The proposed design will include a covered deck or porch, a metal roof with a steep roof slope and long roof overhang and board and batten siding.

Temporary Office

Before the current building is demolished, administrative offices and all associated functions will be temporarily relocated to trailers behind the existing bunkhouse. This site has been previously disturbed and is void of vegetation. No new ground disturbance will be required for positioning of these trailers. Park staff will ensure that the temporary operation is consistent with all applicable laws and regulations and meets the needs of park operations and of the public until the new facility is complete.

Staging Area

Minor secondary staging will occur within the existing parking lot of the administration building. The primary staging area will be at Lindbergh Hill, approximately 5 miles north of the North Rim developed area along Highway 67. Lindbergh Hill is a large, disturbed area that is used for fire camps. It has electrical utilities on site, and no removal of vegetation will be required. Following construction, the site will be returned to pre-construction conditions.

Revegetation

Revegetation of areas disturbed during construction will occur. These efforts will use site-adapted native species, and will be done in accordance with the Salvage and Revegetation plan developed for the site, as described in the Mitigation Measures section of this document. These efforts will not disturb new ground, but will revegetate (grass seeding, shrub and tree planting) areas disturbed during construction and provide landscaping for the building. Some equipment may be necessary to do this and may include augers, small backhoes and handtools.

Mitigation Measures

The mitigation measures listed below are considered part of the preferred alternative and will be followed during project implementation. These actions were developed to lessen the potential for adverse impacts from implementing the preferred alternative, and have proven to be very effective in reducing environmental impacts on previous projects.

Contractor Orientation. Contractors working in the Park are given orientation concerning proper conduct of operations. This orientation is provided in both written form and verbally at a preconstruction meeting. This policy will continue on proposed projects. Orientation topics will include:

- Wildlife should not be approached or fed.
- Collecting any Park resources, including plants, animals, and historic or prehistoric materials, is prohibited.
- Contractor must have a safety policy in place and follow it.
- A vehicle fuel leakage and spill plan will be developed and implemented for this project.
- Other environmental concerns and requirements discussed elsewhere in this EA/AEF will be addressed, including relevant mitigation measures listed below.

Limitation of Area Affected. The following mitigation measures will be implemented to minimize the area affected by construction activities.

- The staging area for the construction office (a trailer), construction equipment, and material storage will be located in previously disturbed areas near the project site. All staging areas will be returned to pre-construction conditions once construction is complete. Standards for this, and methods for determining when the standards are met, will be developed in consultation with the Park Restoration Biologist.
- Construction zones will be fenced with construction tape, snow fencing, or some similar
 material before any construction activity. The fencing will define the construction zone and
 confine activity to the minimum area required for construction. All protection measures will
 be clearly stated in the construction specifications, and workers will be instructed to avoid
 conducting activities beyond the construction zone as defined by the construction zone
 fencing.

Soil Erosion. To minimize soil erosion, the following mitigation measures will be incorporated into the action alternatives.

- Standard erosion control measures such as silt fences, sand bags, or equivalent control methods will be used to minimize any potential soil erosion.
- Any trenching operations will be by rock saw, backhoe, trackhoe, and/or trencher, with excavated material side-cast for storage. After trenching is complete, bedding material will be placed and compacted in the bottom of the trench and the utility lines installed in the bedding material. Back filling and compaction will begin immediately after the utility lines are placed into the trench, and the trench surface will be returned to pre-construction contours. All trenching restoration operations will follow guidelines approved by Park staff. Compacted soils will be scarified and original contours reestablished.
- A Salvage and Revegetation Plan will be developed for the project by a landscape architect or other qualified individual, in coordination with the Park Restoration Biologist. Any revegetation efforts will use site-adapted native species and/or native seed, and Park policies regarding revegetation and site restoration will be incorporated into the plan. The plan will consider, among other things, the use of native species, plant salvage potential, exotic vegetation and noxious weeds, and pedestrian barriers. Policy related to revegetation will be referenced in NPS Management Policies (NPS 2001b; Chapter 9).

Exotic Vegetation and Noxious Weeds. To prevent the introduction and minimize the spread of exotic vegetation and noxious weeds, the following mitigation measures will be incorporated into the action alternatives.

- Existing populations of exotic vegetation at the construction site will be treated prior to construction activities.
- All construction equipment that will leave the road (e.g., bulldozers and backhoes) will be pressure washed prior to entering the Park.
- The location of the staging area for construction equipment will be Park-approved and treated for exotic vegetation.
- Parking of vehicles will be limited to existing roads or the staging area.
- Any fill, rock, or additional topsoil needed will be obtained from a Park-approved source.
- All areas disturbed by construction will be revegetated using site-adapted native seed and/or plants.

Water Quality. To minimize potential impacts to water quality, the following mitigation measures will be incorporated into the action alternatives.

- A storm water pollution prevention plan (SWPPP) will be developed by the contractor and approved by the Park prior to any ground-disturbing activities. All National Pollutant Discharge Elimination System (NPDES) requirements will be met.
- Standard erosion control measures such as silt fences, sand bags, or equivalent control methods will be used to minimize any potential sediment delivery to streams.

Special Status Species. To protect any unknown or undiscovered threatened, endangered, or special status species, the construction contract will include provisions for the discovery of such. These provisions will require the cessation of construction activities until Park staff evaluates the project impact on the discovery and will allow modification of the contract for any protection measures determined necessary to protect the discovery. Mitigation measures for known special status species are as follows:

California Condor

- Prior to the start of a construction project, the Park will contact personnel monitoring California condor locations and movement within the Park to determine the locations and status of condors in or near the project area.
- If a condor occurs at the construction site, construction will cease until it leaves on its own or until permitted personnel employ techniques that result in the individual condor leaving the area.
- Construction workers and supervisors will be instructed to avoid interaction with condors and to contact the appropriate Park or Peregrine Fund personnel immediately if and when condor(s) occur at a construction site.
- The construction site will be cleaned up at the end of each day that work is being conducted (i.e., trash disposed of, scrap materials picked up) to minimize the likelihood of condors visiting the site. Park condor staff will complete a site visit to the area to ensure adequate clean-up measures are taken.
- To prevent water contamination and potential poisoning of condors, a vehicle fluid-leakage and spill plan will be developed and implemented for this project. This plan will be reviewed by the Park biologist for adequacy in addressing condors.
- If a new structure occurs on the rim or above tree line in other areas, there may be a need to install condor deterrent devices on the structure. This will be evaluated on a case-by-case basis by the Park wildlife biologist.
- If non-nesting condors occur within 1 mile of the project area, blasting will be postponed until condors leave or are hazed by permitted personnel.
- If condor nesting activity is known within 1 mile of the project area, then blasting activity will be restricted during the active nesting season, if viable nests persist. The active nesting season is February 1 to October 15, or until young are fully fledged. These dates may be modified based on the most current information, in consultation with the Park biologist and the USFWS.
- If condor nesting activity is known within 0.5 mile of the project area, then light and heavy construction in the project area will be restricted during the active nesting season, if viable nests persist. The active nesting season is February 1 to October 15, or until young are fully fledged. These dates may be modified based on the most current information, in consultation with the Park biologist and the USFWS.

MEXICAN SPOTTED OWL (MSO)

- If a construction project occurs within a Protected Activity Center (PAC) with no known nest site, then all construction activity will be restricted to the non-breeding season (September 1 February 28). However, if the project in a PAC is at least 0.5 mile from known nest sites and the project does not include blasting, then the project can be implemented during the breeding season. The breeding season is March 1 August 31.
- If a construction project outside of PACs occurs within 1 mile of a known PAC nest or roost site, the boundary of a PAC where the nest or roost site is not known, or unsurveyed restricted, protected, or predicted MSO habitat, then all blasting in that project area will be restricted to the non-breeding season (September 1 February 28).
- If a construction project outside of PACs occurs within 0.5 mile of a known PAC nest or roost site, the boundary of a PAC where the nest or roost site is not known, or unsurveyed restricted, protected, or predicted MSO habitat, then light and heavy construction activity in that project area will be restricted to the non-breeding season (September 1 February 28).

Cultural Resources. To minimize the impacts of construction activities on cultural resources, the following mitigation measures will be incorporated into the action alternatives.

- If previously unknown archeological resources are discovered during the course of the project, a park archeologist will be contacted immediately. All work in the immediate vicinity of the discovery will be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in accordance with the stipulations of the 1995 Programmatic Agreement among the National Park Service, the Arizona State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the General Management Plan/Environmental Impact Statement, Grand Canyon National Park, Arizona.
- All workers will be informed of the penalties of illegally collecting artifacts or intentionally damaging any archeological or historic property. Workers will also be informed of the correct procedures if previously unknown resources were uncovered during construction activities.
- All undertakings affecting historic buildings and structures will be carried out in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (60 CFR 35842-35844) and other applicable NPS cultural resources policies and guidelines.

Visual Resources. To minimize visual impacts, mitigation measures will include the following:

- Trenching for underground utilities will be limited as much as possible to a 10-foot wide fenced construction zone. Clearing of trees and understory will be feathered to blend with natural openings in the forest canopy.
- Natural, muted colors will be used to blend any metal surfaces into the landscape.
- All contractors will use Lindbergh Hill for primary staging to minimize ground disturbance
 and to decrease the amount of construction equipment visible to visitors. Secondary staging
 will occur in existing disturbed areas near the project area as needed and as approved by
 park staff.

Visitor Experience. The following mitigation measures will be incorporated into the action alternatives to minimize the impacts of construction activities on the visitor experience:

- The Park may consider restricting construction activities during peak use days such as holidays and some weekends during the busiest times of the year to minimize disruption to visitors.
- Traffic in any one direction will not be stopped for more than 15 minutes to minimize disruption to traffic flow.
- Unless otherwise approved by the Park, operation of heavy construction equipment will be restricted to 8:00 am to 6:00 pm in the summer (May 1- September 30) and to 9:00 am to 5:00 pm during the rest of the year.
- Information regarding implementation of this project and other foreseeable future projects will be shared with the public upon their entry into the park during construction periods. This may take the form of an informational brochure or flyer about the projects distributed at the gate and sent to those with reservations at park facilities, postings on the park's website, press releases, and/or other methods. The purpose of these efforts will be to minimize the potential for negative impacts to the visitor experience on the North Rim during implementation of this project and other planned projects during the same construction season.

Park Operations. The following mitigation measures will be incorporated into the action alternatives to minimize the impacts of construction activities on park operations:

• An independent contract inspector will be hired so Park staff will not need to monitor day to day contract compliance for this and other projects, when the amount of work exceeds the Park staff's capacity for adequate monitoring.

Air Quality. Air quality impacts of the action alternatives are expected to be temporary and localized. To minimize these impacts, the following actions will be taken:

- To reduce entrainment of fine particles from hauling material, sufficient freeboard will be maintained and loose material loads (aggregate, soils, etc.) will be tarped.
- To reduce tailpipe emissions, construction equipment will not be left idling any longer than is necessary for safety and mechanical reasons.
- To reduce construction dust in the short term, water will be applied to problem areas. Equipment will be limited to the fenced project area to minimize soil disturbance and consequent dust generation.
- Landscaping and revegetation will control long-term soil dust production. Mulch and the plants themselves will stabilize the soil and reduce wind speed/shear against the ground surface.

ALTERNATIVES CONSIDERED

The EA/AEF evaluated three alternatives in detail for addressing the purpose and need for action; the No Action alternative, the Preferred Alternative and one additional action alternative. The preferred alternative is as described previously in this document in detail.

Alternative A – No Action Alternative: This alternative does not meet the purpose and need for the project, but provides a basis for comparison with the action alternatives. Alternative A would maintain the existing conditions at the North Rim. A developed zone for the North Rim has been identified in the 1995 GMP and is used to guide management actions. This developed zone, which primarily includes Bright Angel peninsula but also encompasses the North Rim Entrance Road and roads out to the Walhalla Plateau, comprises approximately 1,127 acres within the Bright Angel watershed subunit, or approximately 6% of the subunit. Approximately 234 acres of this, or 21%, is disturbed by past activities and developments. Existing developments include roads, trails, parking areas, buildings, and utilities. The North Rim receives most of its visitation between May and October, when facilities at the North Rim are open. Visitation peaks in the summer months of June and July and is very limited in winter when snow blocks the road. Park staff is present at the North Rim throughout the year, with limited staffing in the winter, and perform general maintenance functions.

This alternative would not change the existing situation. The existing 1,440 square foot visitor services/administrative building would not be removed and a new building would not be constructed. The services provided to the public would remain the same. The existing building would continue to be incompatible with the Historic District. The existing building would likely continue to incur high maintenance costs and would not fully address the increasing need for improved administrative services. The parking area and access to the building would remain the same. Employees, residents and visitors would continue to share the same access into the area and would share the existing 13 car parking area in front of the building. The no action alternative provides a basis for comparing the management direction and environmental consequences of the other action alternatives. If the no action alternative were selected, NPS would respond to future needs related to this building without major actions or changes in course.

Alternative C – New Access Road. This alternative includes those items applicable to both action alternatives as described above under the preferred alternative. In addition, this alternative would locate the new building near the existing building footprint, but behind it. It includes a 15-car, 2-RV parking area, concrete walkways and a new access road to the parking area from the main road. The parking area would be configured as a loop to allow for easy ingress and egress of vehicles, while maintaining existing ground cover and trees in the center. The access to the old building and the existing parking area would no longer be used by visitors and would be restricted to residential and administrative use. This alternative would result in approximately 2 acres of ground disturbance and approximately 20 – 25 trees greater than 6 inches in diameter at breast height (dbh) would need to be removed to accommodate the new access road and parking area. Concrete walkways from the parking area to the administration building would be constructed. Disturbed areas would be revegetated with site-adapted native species.

The EA/AEF also includes a discussion of several other alternatives considered but dismissed from detailed analysis. Initial proposals for this project were for a 3,500 square foot (SF) building. The interdisciplinary team determined that this was too large for the site and could be scaled down, while still meeting the administrative needs for office space. Subsequent designs focused on 2,000 to 3,000 SF buildings. Various building shapes and floor plans were also preliminarily evaluated.

Several proposals to address the need of facilitating traffic flow and minimizing congestion in the area were preliminarily evaluated. The site layout alternatives that came forward as a result of the value analysis included: 1) the construction of a new building on the existing building footprint with a 15-car, 2-RV parking area behind the building in an undeveloped area, accessed via a new road segment from the existing parking area. Visitors would use the same access road as they are currently, except that the existing parking area would be converted to walkways or revegetated and a new parking area would be developed behind the building. This alternative was dismissed from detailed analysis because it would

result in new ground disturbance and tree removal and would alter the character of the site, while still not accomplishing all project objectives; 2) the construction of a new building off the existing building footprint (behind the existing building) and conversion of the old building site into parking. Visitors would use the same access road as they are currently. While this alternative was ultimately dismissed from detailed analysis, certain components of this alternative were determined to have merit and were used as the basis for the formation of the preferred alternative; and 3) the construction of a new building entirely off the existing building footprint and out of, but adjacent to, the Historic District. The parking area would be configured as a loop to allow for easy ingress and egress of vehicles, while maintaining existing ground cover and trees in the center. A new access from the main road to the parking lot would be constructed. The access to the old building would no longer be used by visitors and would be restricted to residential and administrative use. This alternative was dismissed from detailed analysis due to the integrated nature of the administrative building to the Historic district and the need for the building to stay in a similar location for public ease.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which guides the Council on Environmental Quality (CEQ). The CEQ provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101:

- 1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2. assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- 3. attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 4. preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- 5. achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- 6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Using selection factors from the Choosing by Advantages process and through the process of internal scoping, scoping with the public and other agencies, the environmentally preferred alternative selected is Alternative B. Alternative B best meets the purpose and need for action and best addresses the overall Park Service objectives and evaluation factors. Alternative B goes further than Alternatives A or C in addressing the six criteria listed above. The needs of the employees and the visitors now and in the future will be addressed with the replacement of the existing building with a larger one and the reconfiguration of the existing parking area to accommodate future increased use. The building and parking area will be designed to be aesthetically and culturally pleasing. Alternative B preserves important historic, cultural and natural resources in the area by construction of a building that is appropriate for the surrounding historic district and minimizes new ground disturbance. Alternative B, more than the other alternatives, achieves a balance between the needs of employees and visitors and natural and cultural resource protection.

Alternative B greatly minimizes the level of tree removal and new ground disturbance necessary to meet the purpose and need for action, when compared to Alternative C and better meets evaluation criteria 1 and 4 above. Alternative B also minimizes intrusion into the Headquarters Historic District and addresses evaluation criterion 4 more so than Alternative C. No new information came forward from public scoping

or consultation with other agencies to necessitate the development of any new alternatives, other than those described and evaluated in this document. Alternative B is recommended as the Preferred Alternative and meets both the purpose and need for action and the project objectives.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. As fully discussed in the EA/AEF, the preferred alternative will not affect air quality, soundscape, floodplains and wetlands, environmental justice, prime and unique farmland, or the socioeconomic environment.

Implementation of the preferred alternative will result in negligible to minor adverse impacts to soils and water resources through soil compaction and displacement, increases in impermeable surfaces and potential increases in soil erosion.

Implementation of the preferred alternative will result in minor, adverse short-term impacts to vegetation through disturbance during construction and increased potential for spread of noxious weeds on disturbed ground. No trees will need to be removed.

Implementation of the preferred alternative will result in negligible, adverse long-term impacts to Northern goshawk and American peregrine falcon. Implementation of the preferred alternative will result in minor, adverse long-term impacts to Kaibab squirrel.

For purposes of Section 7 consultation under the Endangered Species Act, implementation of the preferred alternative may affect, but is not likely to adversely affect, the Mexican spotted owl or California condor. Concurrence on these determinations was received from the U.S. Fish and Wildlife Service on 9 July 2002, as part of a batch consultation on multiple construction projects in the park.

After applying the Advisory Council on Historic Preservation's criteria for adverse effects (36 CFR, Part 800.5, Assessment of Adverse Effects), the National Park Service determines that implementation of the North Rim administration building will have no adverse effect on identified historic properties. Concurrence on this determination from the State Historic Preservation Office was received in July 2003.

Implementation of the preferred alternative will result in minor to moderate long-term beneficial impacts to park operations through decreased maintenance needs and improved park facilities.

Implementation of the preferred alternative will result in minor to moderate long-term beneficial impacts to visitor experience through improved parking area and administration and backcountry permits office facility.

Degree of effect on public health or safety. The EA/AEF evaluated impacts to park operations and visitor experience. This evaluation determined that implementation of the preferred alternative will result in minor, adverse short-term impacts to visitors due to increased noise and traffic delays during construction. Adherence to mitigation measures designed to minimize safety risks and adverse impacts to visitor experience during project implementation should address these limited risks. It also determined that implementation of the preferred alternative will result in minor to moderate, beneficial, long-term impacts to visitor experience due to construction of new facility that meets all current building codes and accessibility standards and makes improvements in the parking area. Safety risks associated with use of the existing building for administrative functions and as the backcountry permits office will be eliminated with implementation of the preferred alternative, benefiting the safety and health of park employees and

visitors. Vehicle/pedestrian conflicts in the parking area will be minimized by the planned improvements in the parking area under the preferred alternative.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. As fully discussed in the EA/AEF, the preferred alternative will not affect air quality, soundscape, floodplains and wetlands, environmental justice, prime and unique farmland, or the socioeconomic environment. No wild and scenic rivers are designated near the North Rim and none will be affected by implementation of the preferred alternative. No ecologically critical areas occur within the project area and no live trees will be removed as a result of this project.

The project area is located within the North Rim Headquarters Historic District. The North Rim Headquarters Historic District was listed on the National Register of Historic Places in 1982. The design and construction of the administration building will be conducted in full compliance with Director's Order 28 (Cultural Resources Management Guideline) and the Secretary of the Interior's Standards for the Treatment of Historic Properties (Weeks and Kay 1995). The National Park Service determines that implementation of the preferred alternative will result in a "no adverse effect to historic properties" determination. Concurrence on this determination from the State Historic Preservation Office was received in July 2003.

Consultation with concerned tribal officials, Arizona State Historic Preservation Officer, and U. S. Fish and Wildlife Service has been completed.

Degree to which effects on the quality of the human environment are likely to be highly controversial. There were no highly controversial effects identified during either preparation of the EA/AEF or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks. There were no highly uncertain, unique or unknown risks identified in the EA/AEF or during the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. The preferred alternative neither establishes a precedent for future actions with significant effect nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Impacts of the preferred alternative identified in the EA/AEF were to soils and water, vegetation, special status species, cultural resources, visitor experience and park operations. As described in the EA/AEF, a variety of past, present, and reasonably foreseeable future actions have affected or may affect resources in the Bright Angel watershed subunit. Implementation of the preferred alternative in combination with past, present and reasonably foreseeable future actions will result in impacts to resources that range from negligible to moderate, as summarized below.

Implementing the preferred alternative, in combination with past, present and reasonably foreseeable future actions will result in negligible to minor short- and long-term adverse impacts to soils; negligible to minor adverse impacts to vegetation and the potential removal of up to 120-150 primarily ponderosa pine trees greater than 12 inches in diameter at breast height (dbh) within the Bright Angel watershed subunit; minor to moderate adverse impacts to general wildlife populations; negligible to minor adverse impacts Mexican spotted owl; minor short- and long-term adverse impacts to California condor; negligible long-term adverse impacts to American peregrine falcon; minor long- and short-term adverse

impacts to Northern goshawk; moderate short- and long-term adverse impacts to Kaibab squirrel; moderate long-term beneficial impacts to cultural resources, realizing that adverse impacts have occurred in the past; moderate long-term beneficial impacts to park operations, but with moderate short-term adverse impacts during construction; and moderate long-term beneficial impacts to visitor experience, but with moderate short-term impacts during construction season.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. The project area occurs within the North Rim Headquarters Historic District. These are sensitive cultural resources and have been carefully considered throughout the planning process for this project, as documented in the Environmental Assessment/ Assessment of Effect for this project. The State Historic Preservation Office has concurred with the Park's determination that construction of the North Rim administration building will not adversely impact historic properties.

All project areas have had previous archeological survey and the potential for impacts to archeological sites is minimal. Consultation with the concerned tribal officials has been completed.

If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity of the discovery will be halted until the resources are identified and documented. An appropriate mitigation strategy, if necessary, will be developed in consultation with the Arizona State Historic Preservation Office and concerned tribal officials.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat. The California condor was listed as an endangered species in 1967. A nonessential, experimental population of California condors has been established in Northern Arizona, and within Grand Canyon National Park the condor has the full protection of a threatened species. It has been determined by park staff that implementation of the preferred alternative "may affect, but is not likely to adversely affect" the California condor. This determination is based on the potential that condors could be attracted to the increased activity at the project site during construction. Mitigation measures have been developed jointly between park staff and the U.S. Fish and Wildlife Service (FWS) to minimize the potential for adverse impacts to the condor during project implementation. These measures are included as part of the proposed action and identified under the preferred alternative. The FWS has been consulted and concurred with the determination that condors may be affected, but are not likely to be adversely affected by the implementation of the preferred alternative.

The Mexican spotted owl was listed as a threatened species in 1993 and parts of Grand Canyon National Park were designated as critical habitat in 2001. It has been determined by park staff that implementation of the preferred alternative "may affect, but is not likely to adversely affect" MSO. This determination is based on the fact that the project area has been surveyed and no owls have been detected in the project area, the project site is not considered MSO critical habitat, and the nearest Protected Activity Center is greater than 0.5 miles away. Mitigation measures have been developed jointly between park staff and the U.S. Fish and Wildlife Service (FWS) to minimize the potential for adverse impacts to the MSO during project implementation. These measures are included as part of the proposed action and identified under the preferred alternative. The FWS has been consulted and concurred with the determination that MSO may be affected, but are not likely to be adversely affected by implementation of the preferred alternative.

Whether the action threatens a violation of Federal, state or local environmental protection law. The preferred alternative violates no federal, state, or local environmental protection laws.

IMPAIRMENT OF PARK RESOURCES OR VALUES

In addition to determining the environmental consequences of the preferred and other alternatives, National Park Service policy (Management Policies, 2001) requires analysis of potential effects to determine whether or not actions will impair park resources. The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of the park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values. Impairment may result from National Park Service activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. An impact to any park resource or value may constitute impairment. An impact will be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

Because there will be no major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Grand Canyon National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents, there will be no impairment of Grand Canyon National Park's resources or values as a result of implementation of the preferred alternative.

PUBLIC INVOLVEMENT

A public scoping letter, which included several North Rim projects including the administration building, was submitted to a 300-person Grand Canyon National Park mailing list on December 8, 2000, and included eight of the nine affiliated tribes who have expressed interest in projects on the North Rim. This letter was also posted on the park's website. The purpose of the scoping letter was to describe the proposed action to any interested/affected parties and solicit comments from those who may have issues with the proposed action(s). The North Rim projects public scoping was a topic of discussion at the monthly GMP community meeting held at the park on January 11, 2001. A notification and short article on North Rim project proposals was published in the Williams/Grand Canyon newspaper, in the January 3-9, 2001 edition. Seven responses were received. These included the National Tour Association who expressed their support for this project; Five County Association of Governments who expressed support for improvements in visitor facilities and recommended further information-sharing; U. S. Fish and Wildlife Service who provided a species list; Zuni Heritage and Historic Preservation Office who provided no specific comment; Western Office of the National Trust for Historic Preservation who requested information of historic resources; and the Kaibab Band of Paiute Indians who expressed their

strong interest in participation in planning for North Rim projects as early as possible and provided additional comments pertinent to a visitor center.

The North Rim administration building project was also included in a North Rim issue of the park's Uplift and Erosion newsletter distributed in April 2003 to approximately 480 people.

The EA/AEF was made available for public review and comment during a 30-day period ending June 27, 2003 through a combination of direct mailing, issuance of a press release and posting on the park's website. One response was received from the Kaibab Band of Pauite Indians who expressed their acceptance of the preferred alternative B.

NPS staff met with personnel from U.S. Fish and Wildlife Service (USFWS) and Arizona Game and Fish Department on 13 December 2000 to discuss this project proposal and other future proposals. NPS staff met with USFWS several times between March and June 2002 to discuss this project proposal in conjunction with a batch consultation for several construction projects throughout the Park. Concurrence on the batch consultation was received from USFWS on 9 July 2002 and indicated that the projects, including the North Rim administration building, may affect, but is not likely to adversely affect, the Mexican spotted owl and the California condor.

Consultation between the NPS and the State Historic Preservation Officer (SHPO) on this project is complete. Concurrence was received in July 2003. In addition to a site visit and discussions with the SHPO in August 2000, this project was also discussed with the SHPO on January 22, 2001and again at a meeting on October 16, 2002 and February 20, 2003.

CONCLUSION

The preferred alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS). Negative environmental impacts that could occur are negligible to moderate in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, known ethnographic resources, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that the project does not constitute a major federal action significantly affecting the quality of the human environment and an EIS will not be required for this project and thus will not be prepared.

Recommended:	Jeffrey Cross Science Center Director, Grand Canyon National Park	7/ ₁₇ / ₀₃ Date
Recommended:	Joseph F. Alston Superintendent, Grand Canyon National Park	7/17/03 Date
Approved:	Karen P. Wade Intermountain Regional Director	ア/ほ/03 Date